

TOWN OF MEDLEY
POLICE OFFICERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2021

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2019



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 3, 2019

Board of Trustees
Town of Medley
Police Officers' Retirement System
7331 NW 74th St.
Medley, FL 33166

Re: Town of Medley Police Officers' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Town of Medley Police Officers' Retirement System. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Town of Medley, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2019 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.


The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Town of Medley, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By: 
Sara E. Carlson, ASA, EA, MAAA
Enrolled Actuary #17-8546



Patrick T. Donlan, ASA, EA, MAAA
Enrolled Actuary #17-6595

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Town of Medley Police Officers' Retirement System, performed as of October 1, 2019, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2021.

The contribution requirements, compared with those set forth in the October 1, 2018 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2019 <u>9/30/2021</u>	10/1/2018 <u>9/30/2020</u>
Town And State Required Contribution % of Projected Annual Payroll	33.6%	34.9%
State Contribution (Est.) ¹ % of Projected Annual Payroll	\$198,747 6.2%	\$198,747 6.2%
Town Required Contribution ² % of Projected Annual Payroll	27.4%	28.7%

¹ Represents the amount received in calendar 2019. As per a Mutual Consent Agreement between the Membership and the Town, all State Monies received each year will be available to offset the Town's required contribution.

² The required contribution from the combination of Town and State sources for the year ending September 30, 2021, is 33.6% of the actual payroll realized in that year. As a budgeting tool, the Town may contribute 27.4% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that the Town has access to a prepaid contribution of \$1,903,845.59 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2020.

Plan experience was relatively neutral on the basis of the plan's actuarial assumptions. The primary source of actuarial loss was less turnover than expected. This loss was offset by a gain associated with an investment return of 8.45% (Actuarial Asset Basis) which exceeded the 7.50% assumption. However, the contribution requirements decreased when expressed as a percentage of payroll due to the increase in the valuation payroll.

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no changes in benefits since the prior valuation.

Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	37	36
Service Retirees	21	21
DROP Retirees	1	1
Beneficiaries	1	1
Disability Retirees	0	0
Terminated Vested	<u>2</u>	<u>2</u>
 Total	 62	 61
 Total Annual Payroll	 \$3,208,689	 \$2,975,501
Payroll Under Assumed Ret. Age	3,208,689	2,975,501
 Annual Rate of Payments to:		
Service Retirees	1,459,837	1,456,320
DROP Retirees	94,776	93,837
Beneficiaries	52,072	52,072
Disability Retirees	0	0
Terminated Vested	0	0
 B. Assets		
Actuarial Value (AVA) ¹	24,181,034	22,731,015
Market Value (MVA) ¹	26,025,447	25,725,672
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	13,387,984	12,014,426
Disability Benefits	743,721	707,673
Death Benefits	72,832	67,297
Vested Benefits	697,438	647,648
Refund of Contributions	58,136	59,387
Service Retirees	17,106,304	17,258,793
DROP Retirees ¹	1,433,804	1,342,204
Beneficiaries	535,251	544,082
Disability Retirees	0	0
Terminated Vested	<u>18,956</u>	<u>18,956</u>
 Total	 34,054,426	 32,660,466

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	26,039,909	25,232,977
Present Value of Future Member Contributions	1,301,995	1,261,649
FIL Normal Cost (Sponsor)	363,286	338,209
Present Value of Future Normal Costs (EAN)	5,396,214	5,243,666
Accrued Liability (Retirement)	8,868,271	7,621,961
Accrued Liability (Disability)	315,429	290,040
Accrued Liability (Death)	40,023	35,622
Accrued Liability (Vesting)	327,335	292,870
Accrued Liability (Refunds)	12,839	12,272
Accrued Liability (Inactives) ¹	<u>19,094,315</u>	<u>19,164,035</u>
Total Actuarial Accrued Liability (EAN AL)	28,658,212	27,416,800
Total Actuarial Accrued Liability (FIL)	29,804,210	28,530,724
Unfunded Actuarial Accrued Liability (UAAL)	5,623,176	5,799,709
Funded Ratio (AVA / EAN AL)	84.4%	82.9%
Funded Ratio (AVA / FIL AL)	81.1%	79.7%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2019</u>	<u>10/1/2018</u>
Vested Accrued Benefits		
Inactives ¹	19,094,315	19,164,035
Actives	4,521,653	3,442,060
Member Contributions	<u>1,031,170</u>	<u>880,289</u>
Total	24,647,138	23,486,384
Non-vested Accrued Benefits	<u>1,382,570</u>	<u>1,512,531</u>
Total Present Value		
Accrued Benefits (PVAB)	26,029,708	24,998,915
Funded Ratio (MVA / PVAB)	100.0%	102.9%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	720,200	
Benefits Paid	(1,507,784)	
Interest	1,818,377	
Other	<u>0</u>	
Total	1,030,793	

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>

E. Pension Cost

Sponsor Normal Cost (with interest) % of Total Annual Payroll ²	11.7	11.8
Administrative Expenses (with interest) % of Total Annual Payroll ²	1.3	1.1
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2019, with interest) % of Total Annual Payroll ²	20.6	22.0
Required Town and State Contribution % of Total Annual Payroll ²	33.6	34.9

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
Total Required Contribution	1,101,429
Town and State Requirement	950,548
Actual Contributions Made:	
Members (excluding buyback)	150,881
Town	751,801
State	<u>198,747</u>
Total	1,101,429

G. Net Actuarial (Gain)/Loss N/A

¹ The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2019 and 9/30/2018.

² Contributions developed as of 10/1/2019 are expressed as a percentage of total annual payroll at 10/1/2019 of \$3,208,689.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2019	5,623,176
2020	5,359,673
2021	5,076,407
2028	2,400,575
2035	1,006,211
2042	302,981
2049	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2019	5.88%	5.36%
Year Ended 9/30/2018	7.14%	5.32%
Year Ended 9/30/2017	4.38%	5.27%
Year Ended 9/30/2016	7.56%	5.26%
Year Ended 9/30/2015	4.03%	5.22%

(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value


	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2019	2.75%	8.45%	7.50%
Year Ended 9/30/2018	8.26%	7.65%	7.50%
Year Ended 9/30/2017	13.78%	7.86%	7.50%
Year Ended 9/30/2016	9.31%	8.23%	7.50%
Year Ended 9/30/2015	-0.25%	10.33%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2019	\$3,208,689
	10/1/2009	2,411,734
(b) Total Increase		33.04%
(c) Number of Years		10.00
(d) Average Annual Rate		2.90%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.


Sara E. Carlson, ASA, EA, MAAA
Enrolled Actuary #17-8546

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112, Florida Statutes:

Mr. Keith Brinkman
Bureau of Local
Retirement Systems
Post Office Box 9000
Tallahassee, FL 32315-9000

Mr. Steve Bardin
Municipal Police and Fire
Pension Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1) Unfunded Actuarial Accrued Liability as of October 1, 2018	\$5,799,709
(2) Sponsor Normal Cost developed as of October 1, 2018	338,209
(3) Expected administrative expenses for the year ended September 30, 2019	32,349
(4) Expected interest on (1), (2) and (3)	461,557
(5) Sponsor contributions to the System during the year ended September 30, 2019	950,548
(6) Expected interest on (5)	58,100
(7) Unfunded Actuarial Accrued Liability as of September 30, 2019 (1)+(2)+(3)+(4)-(5)-(6)	5,623,176

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2019 <u>Amount</u>	Amortization <u>Amount</u>
	10/1/2010	11	3,835,021	487,663
	10/1/2011	22	514,109	45,044
	10/1/2013	24	381,471	32,310
	10/1/2016	27	727,640	59,160
	10/1/2017	28	<u>164,935</u>	<u>13,257</u>
			5,623,176	637,434

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

75% of active deaths are assumed to be service-incurred.

Interest Rate

7.50% per year compounded annually, net of investment related expenses. This assumption is in line with other Florida municipality pension plans.

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Salary Increases

APH Table S-5 + 2.5%; see table below. Projected salary in the year of retirement is increased to account for non-regular compensation, based on census data provided by the Town for individual accrued sick and annual leave. This assumption is consistent with long term Plan experience.

Salary Scale	
Age	Rate
20	6.78%
25	6.78%
30	6.16%
35	5.72%
40	5.29%
45	4.98%
50	4.67%
55	4.37%
60	4.06%
62+	3.94%

Administrative Expenses

\$39,219 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Retirement Age

Earlier of Age 55 and 10 years of service or Age 52 and 25 years of service. Also, any member who has reached the above criteria is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on Plan provisions.

Early Retirement

Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. We feel that this assumption is reasonable based on Plan provisions.

Termination Rates

% Terminating During the Year	
Age	Rate
20	6.60%
30	5.50%
40	2.86%
50	0.88%
56+	0.22%

This assumption was developed based on an experience study performed September 1, 2016.

Disability Rates

% Becoming Disabled During the Year	
Age	Rate
20	0.14%
30	0.18%
40	0.30%
50	1.00%
60+	2.00%

It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.

Funding Method

Frozen Initial Liability Cost Method.

Amortization Method

New UAAL amortization bases are established according to the following amortization periods:

Experience: N/A
Assumption/Method Changes: 30 Years.
Benefit Changes: 30 Years.

Actuarial Asset Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value.

GLOSSARY

Total Annual Payroll is the projected rate of pay as of the valuation date of all covered Members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Total Required Contribution is equal to the Normal Cost plus administrative expenses adjusted for interest according to the timing of contributions during the year.

Frozen Initial Liability Funding Method (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is reconciled each valuation with charges and credits as follows:

- (a) Charges: the Normal Cost for the prior year, in addition to interest (at the valuation assumption of 7.5%) on the Normal Cost and prior year's UAAL balance.
- (b) Credits: Sponsor contributions with interest at the valuation assumption of 7.5%.

New UAAL bases will be created only for changes in methods, assumptions, or benefits. Actuarial gains and losses are funded as part of the Normal Cost.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. The aggregate gain or loss resulting from the current-year experience differing from the assumptions is amortized over the average future working lifetime of the plan's active membership. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirement associated with plan experience. When assumptions are too optimistic, the plan's contribution requirements could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 237.5% on October 1, 2016 to 160.9% on October 1, 2019, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 66.6%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 81.0% on October 1, 2016 to 84.4% on October 1, 2019.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 0.7% on October 1, 2016 to -1.7% on October 1, 2019. The current Net Cash Flow Ratio of -1.7% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>				
Total Actives	38	37	36	37
Total Inactives ¹	16	18	23	23
Actives / Inactives ¹	237.5%	205.6%	156.5%	160.9%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	20,890,026	23,888,980	25,725,672	26,025,447
Total Annual Payroll	3,158,981	3,056,751	2,975,501	3,208,689
MVA / Total Annual Payroll	661.3%	781.5%	864.6%	811.1%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	11,779,868	14,717,900	19,164,035	19,094,315
Total Accrued Liability (EAN)	24,506,270	25,837,498	27,416,800	28,658,212
Inactive AL / Total AL	48.1%	57.0%	69.9%	66.6%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	19,850,369	21,361,577	22,731,015	24,181,034
Total Accrued Liability (EAN)	24,506,270	25,837,498	27,416,800	28,658,212
AVA / Total Accrued Liability (EAN)	81.0%	82.7%	82.9%	84.4%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	154,389	(46,963)	(255,612)	(452,443)
Market Value of Assets (MVA)	20,890,026	23,888,980	25,725,672	26,025,447
Ratio	0.7%	-0.2%	-1.0%	-1.7%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
2006	50,461.55	N/A
2007	58,214.43	15.4%
2008	44,764.83	-23.1%
2009	73,584.94	64.4%
2010	64,298.13	-12.6%
2011	56,266.95	-12.5%
2012	72,718.45	29.2%
2013	73,866.06	1.6%
2014	109,520.58	48.3%
2015	120,320.93	9.9%
2016	110,856.60	-7.9%
2017	-	-100.0%
2018	262,555.72	N/A
2019	198,747.03	-24.3%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Receivables:	
From General Trust Fund	15,082.92
Total Receivable	15,082.92
Investments:	
Mutual Funds:	
Fixed Income	8,514,352.37
Equity	19,399,856.98
Total Investments	27,914,209.35
Total Assets	27,929,292.27
<u>LIABILITIES</u>	
Prepaid Town Contribution	1,903,845.59
Total Liabilities	1,903,845.59
NET POSITION RESTRICTED FOR PENSIONS	26,025,446.68

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Member	150,880.71
Town	751,801.44
State	198,747.03

Total Contributions 1,101,429.18

Investment Income:

Net Increase in Fair Value of Investments	754,217.97
Less Investment Expense ¹	(2,000.00)

Net Investment Income 752,217.97

Total Additions 1,853,647.15

DEDUCTIONS

Distributions to Members:

Benefit Payments	1,507,783.68
Lump Sum DROP Distributions	0.00
Refunds of Member Contributions	0.00

Total Distributions 1,507,783.68

Administrative Expense 46,088.48

Total Deductions 1,553,872.16

Net Increase in Net Position 299,774.99

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 25,725,671.69

End of the Year 26,025,446.68

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2019

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return ¹	
09/30/2016	9.31%	
09/30/2017	13.78%	
09/30/2018	8.26%	
09/30/2019	2.75%	
Annualized Rate of Return for prior four (4) years:		8.45%
(A) 10/01/2018 Actuarial Assets:		\$22,731,014.89
(I) Net Investment Income:		
1. Earnings and Investment Gains	754,217.97	
2. Change in Actuarial Value	1,150,244.25	
3. Investment Related Expenses	(2,000.00)	
Total		1,902,462.22
(B) 10/01/2019 Actuarial Assets:		\$24,181,034.13
Actuarial Asset Rate of Return = 2I/(A+B-I):		8.45%
10/01/2019 Limited Actuarial Assets:		\$24,181,034.13
10/01/2019 Market Value of Assets:		\$26,025,446.68
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$213,886.29

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2019
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	150,880.71	
Town	751,801.44	
State	198,747.03	
 Total Contributions		 1,101,429.18
Earnings from Investments:		
Earnings and Investment Gains	754,217.97	
Change in Actuarial Value	1,150,244.25	
 Total Earnings and Investment Gains		 1,904,462.22

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,507,783.68	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
 Total Distributions		 1,507,783.68
Expenses:		
Investment related ¹	2,000.00	
Administrative	46,088.48	
 Total Expenses		 48,088.48
 Change in Net Assets for the Year		 1,450,019.24
 Net Assets Beginning of the Year		 22,731,014.89
 Net Assets End of the Year ²		 24,181,034.13

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2018 to September 30, 2019

Beginning of the Year Balance	98,074.06
Plus Additions (est.)	94,775.88
Investment Return Earned	0.00
Less Distributions	0.00
End of the Year Balance (est.)	192,849.94

Note: Investment Return Earned not available at time of valuation.

RECONCILIATION OF TOWN'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2019

(1)	Total Required Contribution Rate	36.5%
(2)	Pensionable Payroll Derived from Member Contributions	\$3,017,614.20
(3)	Total Required Contribution (1) x (2)	1,101,429.18
(4)	Less Actual Member Contributions	(150,880.71)
(5)	Less Allowable State Contribution	<u>(198,747.03)</u>
(6)	Equals Required Town Contribution for Fiscal 2019	751,801.44
(7)	Less 2018 Prepaid Contribution	(1,655,647.03)
(8)	Less Actual Town Contributions	<u>(1,000,000.00)</u>
(9)	Equals Town's Shortfall/(Prepaid) Contribution as of September 30, 2019	(\$1,903,845.59)

STATISTICAL DATA

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Actives</u>				
Number	38	37	36	37
Average Current Age	41.8	42.4	40.4	41.0
Average Age at Employment	30.6	31.7	32.0	31.9
Average Past Service	11.2	10.7	8.4	9.1
Average Annual Salary	\$83,131	\$82,615	\$82,653	\$86,721
<u>Service Retirees</u>				
Number	14	15	21	21
Average Current Age	61.1	61.6	60.3	61.3
Average Annual Benefit	\$65,822	\$70,721	\$69,349	\$69,516
<u>DROP Retirees</u>				
Number	0	1	1	1
Average Current Age	N/A	54.9	55.9	56.9
Average Annual Benefit	N/A	\$100,511	\$93,837	\$94,776
<u>Beneficiaries</u>				
Number	1	1	1	1
Average Current Age	64.3	65.3	66.3	67.3
Average Annual Benefit	\$52,072	\$52,072	\$52,072	\$52,072
<u>Disability Retirees</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Terminated Vested</u>				
Number	2	2	2	2
Average Current Age ¹	37.3	39.2	N/A	N/A
Average Annual Benefit ²	\$55,943	\$55,943	N/A	N/A

¹ Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

² The Average Annual Benefit excludes participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	1	2	0	1	1	0	0	0	0	0	0	5
30 - 34	0	2	1	0	1	2	1	0	0	0	0	7
35 - 39	0	1	0	0	0	2	1	0	0	0	0	4
40 - 44	0	0	0	0	1	2	1	1	0	0	0	5
45 - 49	0	0	0	0	0	2	5	0	2	0	0	9
50 - 54	0	0	1	0	0	3	0	0	2	0	0	6
55 - 59	0	0	0	0	0	0	0	0	0	0	0	0
60 - 64	0	0	0	0	0	0	0	0	0	1	0	1
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	5	2	1	3	11	8	1	4	1	0	37

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	36
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	36
h. New entrants	<u>1</u>
i. Total active life participants in valuation	37

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity</u>)	Vested (Due <u>Refund</u>)	<u>Total</u>
a. Number prior valuation	21	1	1	0	0	2	25
Retired	0	0	0	0	0	0	0
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0	0
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	21	1	1	0	0	2	25

SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	Employees who are classified as full-time sworn police officers shall participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the Town as a Police Officer.
<u>Salary</u>	Total W-2 compensation plus tax exempt, tax sheltered, and tax deferred items of income (including overtime payments up to 300 hours per calendar year, but not including payments for extra duty or special detail work for second party employer). Additionally, Salary shall exclude payments for unused, accrued sick and annual leave hours earned on or after December 5, 2011.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	5.0% of Salary.
<u>Town and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost over 30 years.
<u>Normal Retirement</u>	
Date	Earlier of: 1) age 55 and 10 years of Credited Service, or 2) age 52 and 25 years of Credited Service.
Benefit	3.0% of Average Final Compensation <u>times</u> Credited Service (maximum 75% for those hired on and after October 1, 2008).
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.
<u>Vesting</u>	
Schedule	100% after 10 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date (no imputing).

Disability

Eligibility

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

10 years of Credited Service.

Exclusions

Disability resulting from use of drugs, illegal participation in riots, service in military, etc.

Benefit

Benefit accrued to date of disability under 2.5% benefit accrual rate but not less than 42% of Average Final Compensation (if Service Incurred) or 25% of Average Final Compensation (if not in-line-of-duty).

Duration

Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

Death Benefits

Pre-Retirement

Vested

Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Normal Retirement Date or Early Retirement Date (reduced).

Non-Vested

Refund of accumulated contributions without interest.

Post-Retirement

Benefits payable to beneficiary in accordance with option selected at retirement.

Cost-of-Living Adjustment (COLA)

Effective January 1, 2015, all future retirees, including terminated vested members, disability retirees and pre-retirement death beneficiaries are entitled to a 1.0% annual COLA from benefit commencement date until the date the member attains or would have attained age 62.

Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements.

Participation

Not to exceed 36 months.

Rate of Return

Actual Net Investment Return for Plan assets.

Distribution

Cash lump sum at termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0
Receivables:	
From General Trust Fund	15,083
Total Receivable	15,083
Investments:	
Mutual Funds:	
Fixed Income	8,514,352
Equity	19,399,857
Total Investments	27,914,209
Total Assets	27,929,292
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	27,929,292

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Member	150,881	
Town	1,000,000	
State	198,747	
 Total Contributions		 1,349,628
 Investment Income:		
Net Increase in Fair Value of Investments	754,218	
Less Investment Expense ¹	(2,000)	
 Net Investment Income		 752,218
 Total Additions		 2,101,846

DEDUCTIONS

Distributions to Members:

Benefit Payments	1,507,784	
Lump Sum DROP Distributions	0	
Refunds of Member Contributions	0	
 Total Distributions		 1,507,784
 Administrative Expense		 46,089
 Total Deductions		 1,553,873
 Net Increase in Net Position		 547,973
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		27,381,319
 End of the Year		 27,929,292

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2019)

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Town of Medley Police Officers' Retirement System. The Plan Administrator is responsible for the overall administration of the Plan. It has discretionary authority to construe the terms of the Plan and make determinations on questions that may affect eligibility for benefits. The Plan Administrator may also retain the services of attorneys, accountants, actuaries, investment advisors and other professionals.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	23
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	36
	61
	61

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Town of Medley Police Officers' Retirement System prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 5.0% of Salary.

Town and State Contributions: Remaining amount required in order to pay current costs and amortize any unfunded past service cost over 30 years.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2019:

Asset Class	Target Allocation
Domestic Equity	54%
International Equity	10%
Fixed Income	15%
Cash	15%
Real Estate Equity	6%
Total	100%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 2.75 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements.

Participation: Not to exceed 36 months.

Rate of Return: Actual Net Investment Return for Plan assets.

The DROP balance as September 30, 2019 is \$192,850.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2019 were as follows:

Total Pension Liability	\$ 28,504,357
Plan Fiduciary Net Position	\$ (27,929,292)
Sponsor's Net Pension Liability	\$ 575,065
Plan Fiduciary Net Position as a percentage of Total Pension Liability	97.98%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.62% - 6.68%
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar /90% Annuitant Blue Collar, Scale BB.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated September 1, 2016.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2019 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	5.75%
International Equity	5.75%
Fixed Income	0.75%
Cash	0.00%
Real Estate Equity	5.75%

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current Discount Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 3,865,601	\$ 575,065	\$ (2,173,122)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	646,013	667,397	658,122
Interest	2,019,279	1,947,214	1,828,417
Changes of benefit terms	-	176,287	-
Differences between Expected and Actual Experience	315,249	(226,019)	124,820
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	(1,304,893)	(1,121,040)
Net Change in Total Pension Liability	1,472,757	1,259,986	1,490,319
Total Pension Liability - Beginning	27,031,600	25,771,614	24,281,295
Total Pension Liability - Ending (a)	<u>\$ 28,504,357</u>	<u>\$ 27,031,600</u>	<u>\$ 25,771,614</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,000,000	1,000,000	1,011,680
Contributions - State	198,747	262,556	-
Contributions - Employee	150,881	151,915	152,218
Net Investment Income	752,218	2,092,303	3,045,917
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	(1,304,893)	(1,121,040)
Administrative Expense	(46,089)	(32,349)	(24,940)
Net Change in Plan Fiduciary Net Position	547,973	2,169,532	3,063,835
Plan Fiduciary Net Position - Beginning	27,381,319	25,211,787	22,147,952
Plan Fiduciary Net Position - Ending (b)	<u>\$ 27,929,292</u>	<u>\$ 27,381,319</u>	<u>\$ 25,211,787</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 575,065</u>	<u>\$ (349,719)</u>	<u>\$ 559,827</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.98%	101.29%	97.83%
Covered Payroll ¹	\$ 3,017,614	\$ 3,038,288	\$ 3,044,367
Net Pension Liability as a percentage of Covered Payroll	19.06%	-11.51%	18.39%

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

Changes of benefit terms:

For measurement date 09/30/2018, amounts reported as changes of benefit terms resulted from Ordinance C-426, adopted on May 7, 2018 and provided for an Early Retirement Incentive Program.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2016	09/30/2015	09/30/2014
Total Pension Liability			
Service Cost	618,350	610,822	616,903
Interest	1,704,592	1,638,723	1,541,234
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(362,464)	(413,419)	-
Changes of assumptions	697,984	-	-
Benefit Payments, including Refunds of Employee Contributions	(973,409)	(957,396)	(747,028)
Net Change in Total Pension Liability	1,685,053	878,730	1,411,109
Total Pension Liability - Beginning	22,596,242	21,717,512	20,306,403
Total Pension Liability - Ending (a)	<u>\$ 24,281,295</u>	<u>\$ 22,596,242</u>	<u>\$ 21,717,512</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,050,000	2,067,552	1,165,048
Contributions - State	110,857	120,321	109,521
Contributions - Employee	147,834	141,697	141,619
Net Investment Income	1,892,371	(50,344)	1,596,653
Benefit Payments, including Refunds of Employee Contributions	(973,409)	(957,396)	(747,028)
Administrative Expense	(34,179)	(35,551)	(28,220)
Net Change in Plan Fiduciary Net Position	2,193,474	1,286,279	2,237,592
Plan Fiduciary Net Position - Beginning	19,954,478	18,668,199	16,430,607
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,147,952</u>	<u>\$ 19,954,478</u>	<u>\$ 18,668,199</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,133,343</u>	<u>\$ 2,641,764</u>	<u>\$ 3,049,313</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	91.21%	88.31%	85.96%
Covered Payroll ¹	\$ 2,956,688	\$ 2,943,855	\$ 2,832,374
Net Pension Liability as a percentage of Covered Payroll	72.15%	89.74%	107.66%

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from the following changes:

- The assumed rates of mortality were changed to match those used by the FRS for special risk employees in their July 1, 2015 valuation report.
- The withdrawal rates were increased 10%, based on results of the September 1, 2016 experience study.

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll ¹	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 950,548	\$ 1,198,774	\$ (248,226)	\$ 3,017,614	39.73%
09/30/2018	\$ 929,716	\$ 1,262,556	\$ (332,840)	\$ 3,038,288	41.55%
09/30/2017	\$ 946,798	\$ 1,011,680	\$ (64,882)	\$ 3,044,367	33.23%
09/30/2016	\$ 1,014,144	\$ 1,160,857	\$ (146,713)	\$ 2,956,688	39.26%
09/30/2015	\$ 1,076,688	\$ 2,187,873	\$ (1,111,185)	\$ 2,943,855	74.32%
09/30/2014	\$ 1,274,568	\$ 1,274,568	\$ -	\$ 2,832,374	45.00%

¹ The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Notes to Schedule

Valuation Date: 10/01/2017

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rate:

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90%

Combined Healthy Blue Collar, Scale BB.

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue

Collar, Scale BB.

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant

White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years /40% Annuitant White Collar

with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2016 FRS actuarial valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

75% of active deaths are assumed to happen in the line of duty.

Interest Rate:

7.5% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.

Retirement Age:

Earlier of Age 55 and 10 years of service or Age 52 and 25 years of service. Also, any member who has reached the above criteria is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on Plan provisions.

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Early Retirement: Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. We feel that this assumption is reasonable based on Plan provisions.

Disability Rates: See table below. It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.

Termination Rates: See table below. This assumption was developed based on an experience study preformed September 1, 2016.

Salary Increases: APH Table S-5 + 2.5%; see table below. Projected salary in the year of retirement is increased based on individual accruals to account for non-regular compensation. This assumption is consistent with long term Plan experience.

Payroll Increase: N/A (UAAL amortized as level dollar).

Funding Method: Frozen Initial Liability Cost Method.

Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.14%	6.00%
30	0.18%	5.50%
40	0.30%	2.86%
50	1.00%	0.88%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	2.75%
09/30/2018	8.26%
09/30/2017	13.78%
09/30/2016	9.31%
09/30/2015	-0.25%
09/30/2014	9.09%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2019)

General Information about the Pension Plan

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Town of Medley Police Officers' Retirement System. The Plan Administrator is responsible for the overall administration of the Plan. It has discretionary authority to construe the terms of the Plan and make determinations on questions that may affect eligibility for benefits. The Plan Administrator may also retain the services of attorneys, accountants, actuaries, investment advisors and other professionals. Employees who are classified as full-time sworn police officers shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	23
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	36
	61
	61

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Town of Medley Police Officers' Retirement System prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 5.0% of Salary.

Town and State Contributions: Remaining amount required in order to pay current costs and amortize any unfunded past service cost over 30 years.

Net Pension Liability

The measurement date is September 30, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019.

The reporting period is October 1, 2018 through September 30, 2019.

The Sponsor's Net Pension Liability was measured as of September 30, 2019.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation		2.50%
Salary Increases	4.62% - 6.68%	
Discount Rate		7.50%
Investment Rate of Return		7.50%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar /90% Annuitant Blue Collar, Scale BB.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman’s July 1, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated September 1, 2016.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, Net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2019 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	54%	5.75%
International Equity	10%	5.75%
Fixed Income	15%	0.75%
Cash	15%	0.00%
Real Estate Equity	6%	5.75%
Total	100%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances as September 30, 2018	\$ 27,031,600	\$ 27,381,319	\$ (349,719)
Changes for a Year:			
Service Cost	646,013	-	646,013
Interest	2,019,279	-	2,019,279
Differences between Expected and Actual Experience	315,249	-	315,249
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,000,000	(1,000,000)
Contributions - State	-	198,747	(198,747)
Contributions - Employee	-	150,881	(150,881)
Net Investment Income	-	752,218	(752,218)
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	(1,507,784)	-
Administrative Expense	-	(46,089)	46,089
Net Changes	1,472,757	547,973	924,784
Balances as September 30, 2019	\$ 28,504,357	\$ 27,929,292	\$ 575,065

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 3,865,601	\$ 575,065	\$ (2,173,122)

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2019**

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$701,559.

On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	334,034	424,143
Changes of assumptions	299,136	-
Net difference between Projected and Actual Earnings on Pension Plan investments	285,302	-
Total	\$ 918,472	\$ 424,143

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2020	\$ (113,116)
2021	\$ (36,217)
2022	\$ 299,673
2023	\$ 291,447
2024	\$ 52,542
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Measurement Date ²	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	646,013	667,397	658,122
Interest	2,019,279	1,947,214	1,828,417
Changes of benefit terms	-	176,287	-
Differences between Expected and Actual Experience	315,249	(226,019)	124,820
Changes of assumptions	-	-	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	(1,304,893)	(1,121,040)
Net Change in Total Pension Liability	1,472,757	1,259,986	1,490,319
Total Pension Liability - Beginning	27,031,600	25,771,614	24,281,295
Total Pension Liability - Ending (a)	<u>\$ 28,504,357</u>	<u>\$ 27,031,600</u>	<u>\$ 25,771,614</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,000,000	1,000,000	1,011,680
Contributions - State	198,747	262,556	-
Contributions - Employee	150,881	151,915	152,218
Net Investment Income	752,218	2,092,303	3,045,917
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	(1,304,893)	(1,121,040)
Administrative Expense	(46,089)	(32,349)	(24,940)
Net Change in Plan Fiduciary Net Position	547,973	2,169,532	3,063,835
Plan Fiduciary Net Position - Beginning	27,381,319	25,211,787	22,147,952
Plan Fiduciary Net Position - Ending (b)	<u>\$ 27,929,292</u>	<u>\$ 27,381,319</u>	<u>\$ 25,211,787</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 575,065</u>	<u>\$ (349,719)</u>	<u>\$ 559,827</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.98%	101.29%	97.83%
Covered Payroll ¹	\$ 3,017,614	\$ 3,038,288	\$ 3,044,367
Net Pension Liability as a percentage of Covered Payroll	19.06%	-11.51%	18.39%

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

² Effective for the City's fiscal year ending 09/30/2017, the GASB 68 measurement date of the Pension Expense was changed from 09/30/2016 to 09/30/2017.

Changes of benefit terms:

For measurement date 09/30/2018, amounts reported as changes of benefit terms resulted from Ordinance C-426, adopted on May 7, 2018 and provided for an Early Retirement Incentive Program.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

Measurement Date ²	09/30/2016	09/30/2015	09/30/2014
Total Pension Liability			
Service Cost	618,350	610,822	616,903
Interest	1,704,592	1,638,723	1,541,234
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(362,464)	(413,419)	-
Changes of assumptions	697,984	-	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(973,409)	(957,396)	(747,028)
Net Change in Total Pension Liability	1,685,053	878,730	1,411,109
Total Pension Liability - Beginning	22,596,242	21,717,512	20,306,403
Total Pension Liability - Ending (a)	<u>\$ 24,281,295</u>	<u>\$ 22,596,242</u>	<u>\$ 21,717,512</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,050,000	2,067,552	1,165,048
Contributions - State	110,857	120,321	109,521
Contributions - Employee	147,834	141,697	141,619
Net Investment Income	1,892,371	(50,344)	1,596,653
Benefit Payments, including Refunds of Employee Contributions	(973,409)	(957,396)	(747,028)
Administrative Expense	(34,179)	(35,551)	(28,220)
Net Change in Plan Fiduciary Net Position	2,193,474	1,286,279	2,237,592
Plan Fiduciary Net Position - Beginning	19,954,478	18,668,199	16,430,607
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,147,952</u>	<u>\$ 19,954,478</u>	<u>\$ 18,668,199</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,133,343</u>	<u>\$ 2,641,764</u>	<u>\$ 3,049,313</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	91.21%	88.31%	85.96%
Covered Payroll ¹	\$ 2,956,688	\$ 2,943,855	\$ 2,832,374
Net Pension Liability as a percentage of Covered Payroll	72.15%	89.74%	107.66%

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

² Effective for the City's fiscal year ending 09/30/2017, the GASB 68 measurement date of the Pension Expense was changed from 09/30/2016 to 09/30/2017.

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from the following changes:

- The assumed rates of mortality were changed to match those used by the FRS for special risk employees in their July 1, 2015 valuation report.
- The withdrawal rates were increased 10%, based on results of the September 1, 2016 experience study.

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll ¹	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 950,548	\$ 1,198,774	\$ (248,226)	\$ 3,017,614	39.73%
09/30/2018	\$ 929,716	\$ 1,262,556	\$ (332,840)	\$ 3,038,288	41.55%
09/30/2017	\$ 946,798	\$ 1,011,680	\$ (64,882)	\$ 3,044,367	33.23%
09/30/2016	\$ 1,014,144	\$ 1,160,857	\$ (146,713)	\$ 2,956,688	39.26%
09/30/2015	\$ 1,076,688	\$ 2,187,873	\$ (1,111,185)	\$ 2,943,855	74.32%
09/30/2014	\$ 1,274,568	\$ 1,274,568	\$ -	\$ 2,832,374	45.00%

¹ The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Notes to Schedule

Valuation Date: 10/01/2017
Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rate: *Healthy Active Lives:*
Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Healthy Inactive Lives:
Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.
Disabled Lives:
Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.
Male: 60% RP2000 Disabled Male setback four years /40% Annuitant White Collar with no setback, no projection scale.

Interest Rate: 7.5% of active deaths are assumed to happen in the line of duty.
7.5% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.

Retirement Age: Earlier of Age 55 and 10 years of service or Age 52 and 25 years of service. Also, any member who has reached the above criteria is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on Plan provisions.

GASB 68

Early Retirement: Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. We feel that this assumption is reasonable based on Plan provisions.

Disability Rates: See table below. It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.

Termination Rates: See table below. This assumption was developed based on an experience study preformed September 1, 2016.

Salary Increases: APH Table S-5 + 2.5%; see table below. Projected salary in the year of retirement is increased based on individual accruals to account for non-regular compensation. This assumption is consistent with long term Plan experience.

Payroll Increase: N/A (UAAL amortized as level dollar).

Funding Method: Frozen Initial Liability Cost Method.

Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.14%	6.00%
30	0.18%	5.50%
40	0.30%	2.86%
50	1.00%	0.88%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (349,719)	\$ 1,715,762	\$ 788,119	\$ -
Total Pension Liability Factors:				
Service Cost	646,013	-	-	646,013
Interest	2,019,279	-	-	2,019,279
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	315,249	-	315,249	-
Current year amortization of experience difference	-	(148,511)	(70,370)	(78,141)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(99,712)	99,712
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	-	-	-
Net change	<u>1,472,757</u>	<u>(148,511)</u>	<u>145,167</u>	<u>2,686,863</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,000,000	-	-	-
Contributions - State	198,747	-	-	-
Contributions - Employee	150,881	-	-	(150,881)
Projected Net Investment Income	2,045,940	-	-	(2,045,940)
Difference between projected and actual earnings on Pension Plan investments	(1,293,722)	-	1,293,722	-
Current year amortization	-	(393,434)	(558,862)	165,428
Benefit Payments, including Refunds of Employee Contributions	(1,507,784)	-	-	-
Administrative Expenses	(46,089)	-	-	46,089
Net change	<u>547,973</u>	<u>(393,434)</u>	<u>734,860</u>	<u>(1,985,304)</u>
Ending Balance	<u>\$ 575,065</u>	<u>\$ 1,173,817</u>	<u>\$ 1,668,146</u>	<u>\$ 701,559</u>

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 1,293,722	5	\$ 258,746	\$ 258,744	\$ 258,744	\$ 258,744	\$ 258,744	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (198,523)	5	\$ (39,705)	\$ (39,705)	\$ (39,705)	\$ (39,705)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (1,384,149)	5	\$ (276,830)	\$ (276,830)	\$ (276,830)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (384,494)	5	\$ (76,899)	\$ (76,899)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,500,582	5	\$ 300,116	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 165,428	\$ (134,690)	\$ (57,791)	\$ 219,039	\$ 258,744	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2016	\$ 697,984	7	\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 315,249	6	\$ 52,539	\$ 52,542	\$ 52,542	\$ 52,542	\$ 52,542	\$ 52,542	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (226,019)	6	\$ (37,670)	\$ (37,670)	\$ (37,670)	\$ (37,670)	\$ (37,670)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 124,820	7	\$ 17,831	\$ 17,831	\$ 17,831	\$ 17,831	\$ 17,831	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (362,464)	7	\$ (51,781)	\$ (51,781)	\$ (51,781)	\$ (51,781)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (413,419)	7	\$ (59,060)	\$ (59,060)	\$ (59,060)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (78,141)	\$ (78,138)	\$ (78,138)	\$ (19,078)	\$ 32,703	\$ 52,542	\$ -	\$ -	\$ -	\$ -	\$ -